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EXAMINER

MOORE JR, MICHAEL J

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

<i>Office Action Summary</i>	Application No. 09/323,135	Applicant(s) LAROQUE ET AL.	
	Examiner MICHAEL J. MOORE, JR.	Art Unit 2419	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 December 2008.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-23 and 25-30 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-23 and 25-30 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 December 2008 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 12/22/08 has been entered.

Drawings

2. Replacement drawings were received on 12/22/08. These drawings are acceptable and have been entered.

Claim Objections

3. Claims 20 and 21 are objected to because of the following informalities: Regarding claims 20 and 21, on line 1 of each of these claims, the word "instructions" should be changed to "computer program" in order to correspond with the amendments made to claims 19 and 17, respectively.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claim 30 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Specifically, new claim 30 recites "wherein a physical interface of the signaling channels comprise at least one of" the claimed listed protocols. There is some confusion regarding this limitation, as it is not clear how a physical interface comprises a protocol. It is Examiner's understanding that a physical interface may comprise an interface compatible with a particular protocol and/or how a physical interface may be encoded with firmware or software code/instructions that enables the interface to utilize a particular protocol for data processing/transmission/reception, but it not entirely clear how a physical interface comprises the protocol itself. Further clarification is requested.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

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8. Claims 1-23 and 25-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dunn et al. (U.S. 6,324,280) (hereinafter "Dunn") in view of Park (U.S. 5,675,634).

Regarding claim 1, *Dunn* teaches the originating switch 1 (circuit switch) of Figure 1.

Dunn also teaches network 6 (coupler) of switch 1 used for establishing connections between the PSTN and the Internet or toll network as spoken of on column 2, lines 53-55.

Dunn also teaches processor 5 (interpreter) of switch 1 of Figure 1 that receives a request (order) to establish a connection from originating station 25, analyzes the digits of the call request, determines whether to route the call either over the Internet or the toll network based on the analysis, and then generates appropriate call setup signaling (configuration) for either the toll network (conventional call setup) or the Internet (IAM message) as spoken of on column 4, lines 5-18.

Dunn also teaches terminating toll switch 2 (receiver) that in response to receipt of initial address message (IAM) 40, returns an IAM acknowledgement containing the same call ID as well as an added field IP 2 47 (flag) indicating the IP address of the terminating toll switch 2 as shown in Figure 1 and spoken of on column 3, lines 45-50.

Dunn also teaches the call origination containing dialed digits (string) as spoken of on column 3, lines 18-21 as well as column 4, lines 5-8.

Dunn does not teach "wherein the receive flag is an internal flag of the switch and is not transmitted with the signaling message from the switch".

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However, *Park* teaches an apparatus for a switching system where internal flags used for transmission and reception of data are written and read to/from a common memory between a host processor 21 and a CPU 23 as spoken of on column 4, lines 2-18.

At the time of the invention, it would have been obvious to someone of ordinary skill in the art, given these references, to combine the internal flag usage of *Park* with the switching system of *Dunn* in order to allow effective reception, processing, and transmission of data via internal switch components as spoken of on column 4, lines 2-18 of *Park*.

Regarding claim 2, *Dunn* further teaches terminating toll switch 2 that receives an initial address message (IAM) 40 indicating the IP address of the originating switch 1 as spoken of on column 3, lines 39-45.

Dunn further teaches terminating toll switch 2 that in response to receipt (processing) of initial address message (IAM) 40, returns an IAM acknowledgement containing the same call ID as well as an added field IP 2 47 (flag) indicating the IP address of the terminating toll switch 2 as shown in Figure 1 and spoken of on column 3, lines 45-50.

Dunn further teaches terminating toll switch 2 that responds to a packet identifying the call associated with its identification by sending a packet containing the same call identifier replaced with an identifier of the originating switch 1 as spoken of on column 3, lines 63-67.

Regarding claims 3 and 18, *Dunn* teaches a request (send order) to establish a connection from originating station 25, as well as terminating toll switch 2 (switch) that in response to receipt of initial address message (IAM) 40, returns an IAM acknowledgement containing the same call ID as well as an added field IP 2 47 (receive flag) indicating the IP address of the terminating toll switch 2 as shown in Figure 1 and spoken of on column 3, lines 45-50.

Dunn also teaches processor 5 (interpreter) of switch 1 of Figure 1 that receives a request (order) to establish a connection from originating station 25, analyzes the digits of the call request, determines whether to route the call either over the Internet or the toll network (types of signaling channels) based on the analysis, and then generates appropriate call setup signaling (configuration) for either the toll network (conventional call setup) or the Internet (IAM message) as spoken of on column 4, lines 5-18.

Dunn also teaches the sending (outputting) of the appropriate call signaling over the network as spoken of on column 4, lines 12-18.

Dunn also teaches the IAM acknowledgement containing the same call ID as well as an added field IP 2 47 (receive flag) indicating the IP address (specified constant) of the terminating toll switch 2 as shown in Figure 1 and spoken of on column 3, lines 45-50, as well as the call origination containing dialed digits (character string) as spoken of on column 3, lines 18-21 as well as column 4, lines 5-8.

Dunn does not teach “wherein the receive flag is an internal flag of the switch and is not transmitted with the signaling message from the switch”.

However, *Park* teaches an apparatus for a switching system where internal flags (specified constants) used for transmission and reception of data are written and read to/from a common memory between a host processor 21 and a CPU 23 as spoken of on column 4, lines 2-18.

At the time of the invention, it would have been obvious to someone of ordinary skill in the art, given these references, to combine the internal flag usage of *Park* with the switching system of *Dunn* in order to allow effective reception, processing, and transmission of data via internal switch components as spoken of on column 4, lines 2-18 of *Park*.

Regarding claim 4, *Dunn* further teaches terminating toll switch 2 that responds to a packet identifying the call associated with its identification by sending a packet containing the same call identifier replaced with an identifier of the originating switch 1 as spoken of on column 3, lines 63-67.

Regarding claim 5, *Dunn* further teaches the IP communication shown in Figure 1.

Regarding claim 6, *Dunn* further teaches processor 5 (microprocessor) of the switch 1 of Figure 1.

Regarding claim 7, *Dunn* further teaches the IP communication shown in Figure 1.

Regarding claim 8, *Dunn* further teaches processor 5 (microprocessor) of the switch 1 of Figure 1.

Regarding claim 9, *Dunn* teaches the originating switch 1 (circuit switch) of Figure 1.

Dunn also teaches network 6 (coupler) of switch 1 used for establishing connections between the PSTN and the Internet or toll network as spoken of on column 2, lines 53-55.

Dunn also teaches processor 5 (interpreter) of switch 1 of Figure 1 that receives a request (order) to establish a connection from originating station 25, analyzes the digits of the call request, determines whether to route the call either over the Internet or the toll network based on the analysis, and then generates appropriate call setup signaling (configuration) for either the toll network (conventional call setup) or the Internet (IAM message) as spoken of on column 4, lines 5-18.

Dunn also teaches terminating toll switch 2 (receiver) that in response to receipt of initial address message (IAM) 40, returns an IAM acknowledgement containing the same call ID as well as an added field IP 2 47 (flag) indicating the IP address of the terminating toll switch 2 as shown in Figure 1 and spoken of on column 3, lines 45-50.

Dunn also teaches the call origination containing dialed digits (string) as spoken of on column 3, lines 18-21 as well as column 4, lines 5-8.

Dunn also teaches terminating toll switch 2 that receives an initial address message (IAM) 40 indicating the IP address of the originating switch 1 as spoken of on column 3, lines 39-45.

Dunn also teaches terminating toll switch 2 that in response to receipt (processing) of initial address message (IAM) 40, returns an IAM acknowledgement

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containing the same call ID as well as an added field IP 2 47 indicating the IP address of the terminating toll switch 2 as shown in Figure 1 and spoken of on column 3, lines 45-50.

Dunn also teaches terminating toll switch 2 that responds to a packet identifying the call associated with its identification by sending a packet containing the same call identifier replaced with an identifier of the originating switch 1 as spoken of on column 3, lines 63-67.

Dunn also teaches the signaling messages 40, 45, 50, 55 transmitted via CCS7 network 5 (interface) as well as Internet 10 (interface) as shown in Figure 1.

Dunn does not teach "a receiver for adding a receive flag for internal use only".

However, *Park* teaches an apparatus for a switching system where internal flags used for transmission and reception of data are written and read to/from a common memory between a host processor 21 and a CPU 23 as spoken of on column 4, lines 2-18.

At the time of the invention, it would have been obvious to someone of ordinary skill in the art, given these references, to combine the internal flag usage of *Park* with the switching system of *Dunn* in order to allow effective reception, processing, and transmission of data via internal switch components as spoken of on column 4, lines 2-18 of *Park*.

Regarding claim 10, *Dunn* further teaches the call origination containing dialed digits (character string) as spoken of on column 3, lines 18-21 as well as column 4, lines 5-8.

Regarding claim 11, *Dunn* further teaches terminating toll switch 2 (receiver) that in response to receipt of initial address message (IAM) 40, returns an IAM acknowledgement containing the same call ID as well as an added field IP 2 47 (receive flag) indicating the IP address of the terminating toll switch 2 as shown in Figure 1 and spoken of on column 3, lines 45-50.

Regarding claim 12, *Dunn* further teaches terminating toll switch 2 that responds to a packet identifying the call associated with its identification by sending a packet containing the same call identifier replaced with an identifier of the originating switch 1 as spoken of on column 3, lines 63-67.

Regarding claim 13, *Dunn* further teaches terminating toll switch 2 that responds to a packet identifying the call associated with its identification by sending a packet containing the same call identifier replaced with an identifier of the originating switch 1 as spoken of on column 3, lines 63-67.

Regarding claim 14, *Dunn* further teaches processor 5 (interpreter) of switch 1 of Figure 1 that receives a request (order) to establish a connection from originating station 25, analyzes the digits of the call request, determines whether to route the call either over the Internet or the toll network based on the analysis, and then generates appropriate call setup signaling (configuration) for either the toll network (conventional call setup) or the Internet (IAM message) as spoken of on column 4, lines 5-18.

Regarding claim 15, *Dunn* teaches the originating switch 1 (circuit switch) of Figure 1.

Dunn also teaches network 6 (coupler) of switch 1 used for establishing connections between the PSTN and the Internet or toll network (different types) as spoken of on column 2, lines 53-55.

Dunn also teaches processor 5 (interpreter) of switch 1 of Figure 1 that receives a request (order) to establish a connection from originating station 25, analyzes the digits of the call request, determines whether to route the call either over the Internet or the toll network based on the analysis, and then generates appropriate call setup signaling (configuration) for either the toll network (conventional call setup) or the Internet (IAM message) as spoken of on column 4, lines 5-18.

Dunn also teaches terminating toll switch 2 (receiver) that in response to receipt of initial address message (IAM) 40, returns an IAM acknowledgement containing the same call ID as well as an added field IP 2 47 (flag) indicating the IP address of the terminating toll switch 2 as shown in Figure 1 and spoken of on column 3, lines 45-50.

Dunn also teaches the call origination containing dialed digits (string) as spoken of on column 3, lines 18-21 as well as column 4, lines 5-8.

Dunn also teaches the choice of routing the call either over the Internet or over the toll network based on factors such as the present state of the networks, customer input, or dialed information (criteria) as spoken of on column 3, lines 10-21.

Dunn does not teach "a receiver for adding a receive flag for internal use only".

However, *Park* teaches an apparatus for a switching system where internal flags used for transmission and reception of data are written and read to/from a common

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memory between a host processor 21 and a CPU 23 as spoken of on column 4, lines 2-18.

At the time of the invention, it would have been obvious to someone of ordinary skill in the art, given these references, to combine the internal flag usage of *Park* with the switching system of *Dunn* in order to allow effective reception, processing, and transmission of data via internal switch components as spoken of on column 4, lines 2-18 of *Park*.

Regarding claim 16, *Dunn* further teaches the signaling messages 40, 45, 50, 55 transmitted via CCS7 network 5 (interface) as well as Internet 10 (interface) as shown in Figure 1.

Regarding claim 17, *Dunn* teaches network 6 (coupler) of switch 1 used for establishing connections between the PSTN and the Internet or toll network as spoken of on column 2, lines 53-55.

Dunn also teaches processor 5 of switch 1 of Figure 1 that receives a request (order) to establish a connection from originating station 25, analyzes the digits of the call request, determines whether to route the call either over the Internet or the toll network based on the analysis, and then generates appropriate call setup signaling (configuration) for either the toll network (conventional call setup) or the Internet (IAM message) as spoken of on column 4, lines 5-18.

Dunn also teaches terminating toll switch 2 (receiver) that in response to receipt of initial address message (IAM) 40, returns an IAM acknowledgement containing the

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same call ID as well as an added field IP 2 47 indicating the IP address of the terminating toll switch 2 as shown in Figure 1 and spoken of on column 3, lines 45-50.

Dunn also teaches the sending of the appropriate call signaling over the network as spoken of on column 4, lines 12-18.

Dunn also teaches the call origination containing dialed digits (string) as spoken of on column 3, lines 18-21 as well as column 4, lines 5-8.

Dunn does not teach "wherein the receive flag is an internal flag of the switch and is not transmitted with the signaling message from the switch".

However, *Park* teaches an apparatus for a switching system where internal flags used for transmission and reception of data are written and read to/from a common memory between a host processor 21 and a CPU 23 as spoken of on column 4, lines 2-18.

At the time of the invention, it would have been obvious to someone of ordinary skill in the art, given these references, to combine the internal flag usage of *Park* with the switching system of *Dunn* in order to allow effective reception, processing, and transmission of data via internal switch components as spoken of on column 4, lines 2-18 of *Park*.

Regarding claim 19, *Dunn* teaches network 6 (coupler) of switch 1 used for establishing connections between the PSTN and the Internet or toll network as spoken of on column 2, lines 53-55.

Dunn also teaches processor 5 (interpreter) of switch 1 of Figure 1 that receives a request (order) to establish a connection from originating station 25, analyzes the

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digits of the call request, determines whether to route the call either over the Internet or the toll network based on the analysis, and then generates appropriate call setup signaling (configuration) for either the toll network (conventional call setup) or the Internet (IAM message) as spoken of on column 4, lines 5-18.

Dunn also teaches terminating toll switch 2 (receiver) that in response to receipt of initial address message (IAM) 40, returns an IAM acknowledgement containing the same call ID as well as an added field IP 2 47 indicating the IP address of the terminating toll switch 2 as shown in Figure 1 and spoken of on column 3, lines 45-50.

Dunn also teaches the call origination containing dialed digits (string) as spoken of on column 3, lines 18-21 as well as column 4, lines 5-8.

Dunn also teaches terminating toll switch 2 that receives an initial address message (IAM) 40 indicating the IP address of the originating switch 1 as spoken of on column 3, lines 39-45.

Dunn also teaches terminating toll switch 2 that in response to receipt (processing) of initial address message (IAM) 40, returns an IAM acknowledgement containing the same call ID as well as an added field IP 2 47 indicating the IP address of the terminating toll switch 2 as shown in Figure 1 and spoken of on column 3, lines 45-50.

Dunn also teaches terminating toll switch 2 that responds to a packet identifying the call associated with its identification by sending a packet containing the same call identifier replaced with an identifier of the originating switch 1 as spoken of on column 3, lines 63-67.

Dunn does not teach “wherein the receive flag is an internal flag of the switch and is not transmitted with the signaling message from the switch”.

However, *Park* teaches an apparatus for a switching system where internal flags used for transmission and reception of data are written and read to/from a common memory between a host processor 21 and a CPU 23 as spoken of on column 4, lines 2-18.

At the time of the invention, it would have been obvious to someone of ordinary skill in the art, given these references, to combine the internal flag usage of *Park* with the switching system of *Dunn* in order to allow effective reception, processing, and transmission of data via internal switch components as spoken of on column 4, lines 2-18 of *Park*.

Regarding claim 20, *Dunn* further teaches the signaling messages 40, 45, 50, 55 transmitted via CCS7 network 5 (interface) as well as Internet 10 (interface) as shown in Figure 1.

Regarding claim 21, *Dunn* further teaches the routing of the call over the Internet or toll network based on the present state (predetermined criteria) of the two networks as spoken of on column 3, lines 10-13.

Regarding claim 22, *Dunn* further teaches terminating toll switch 2 that responds to a packet identifying the call associated with its identification by sending a packet containing the same call identifier replaced with an identifier of the originating switch 1 as spoken of on column 3, lines 63-67.

Regarding claim 23, *Dunn* does not teach “wherein the switch only internally uses the receive flag of the received signaling message”.

However, *Park* teaches an apparatus for a switching system where internal flags used for transmission and reception of data are written and read to/from a common memory between a host processor 21 and a CPU 23 as spoken of on column 4, lines 2-18.

At the time of the invention, it would have been obvious to someone of ordinary skill in the art, given these references, to combine the internal flag usage of *Park* with the switching system of *Dunn* in order to allow effective reception, processing, and transmission of data via internal switch components as spoken of on column 4, lines 2-18 of *Park*.

Regarding claim 25, *Dunn* further teaches terminating toll switch 2 that in response to receipt of initial address message (IAM) 40, returns an IAM acknowledgement containing the same call ID as well as an added field IP 2 47 (instruction to process) indicating the IP address of the terminating toll switch 2 as shown in Figure 1 and spoken of on column 3, lines 45-50.

Regarding claim 26, *Dunn* further teaches the call origination containing dialed digits (string) as spoken of on column 3, lines 18-21 as well as column 4, lines 5-8, that corresponds to a particular connection or route (same particular character string) used for call completion to a particular destination.

Regarding claim 27, *Dunn* further teaches the call origination containing dialed digits (string) as spoken of on column 3, lines 18-21 as well as column 4, lines 5-8, that

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corresponds to a particular connection or route (obeys syntax of signaling channel) used for call completion to a particular destination.

Regarding claim 28, *Dunn* further teaches terminating toll switch 2 (having an interpreter processor 5) that in response to receipt of initial address message (IAM) 40, returns an IAM acknowledgement containing the same call ID as well as an added field IP 2 47 (flag) indicating the IP address of the terminating toll switch 2 as shown in Figure 1 and spoken of on column 3, lines 45-50.

Regarding claim 29, *Dunn* further teaches the call origination containing dialed digits (string) as spoken of on column 3, lines 18-21 as well as column 4, lines 5-8, that corresponds to a particular connection or route (same particular character string) used for call completion to a particular destination.

Regarding claim 30, *Dunn* further teaches the use of IP signaling through the CCS7 network 5 as shown in Figure 1.

Response to Arguments

9. Applicant's arguments with respect to the previous rejections of claims 3-6, 14, and 18 under 35 USC § 112, 2nd paragraph have been fully considered and are persuasive. These particular rejections have been withdrawn. Specifically, after further review of Figure 2 and the accompanying disclosure pointed out by Applicant, it is seen how steps 23 and 24 may in fact occur subsequent to steps 25-28 through the loopback arrow in the algorithm shown in Figure 2.

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10. Applicant's arguments with respect to the previous rejections of claims 17-21 under 35 USC § 101 have been fully considered and are persuasive. These particular rejections have been withdrawn. Specifically, Applicant has amended claims 17-21 to now be directed to "a computer program embodied on a microprocessor". Referring to Applicant's supporting disclosure on page 8, lines 24-28, it is assumed that the "microprocessor" disclosed is a physical entity, and that in the embodiment where the interpreter 14 comprises this microprocessor, that the interpreter is programmable which implies that the "microprocessor" is also programmable. Therefore, since claims 17-21 are now directed to "a computer program embodied on a microprocessor", it is agreed that these claims are now limited to a statutory embodiment of invention.

11. Applicant's arguments with respect to the previous rejections of claims 17-21 under 35 USC § 112, 1st paragraph have been fully considered and are persuasive. These particular rejections have been withdrawn. Specifically, Applicant has amended claims 17-21 to now be directed to "a computer program embodied on a microprocessor". Referring to Applicant's supporting disclosure on page 8, lines 24-28, it is assumed that the "microprocessor" disclosed is a physical entity, and that in the embodiment where the interpreter 14 comprises this microprocessor, that the interpreter is programmable which implies that the "microprocessor" is also programmable. It follows that since the "microprocessor" is programmable, that a computer program embodied on the "microprocessor" would correspond to this programmability feature.

Therefore, after reconsideration, it is held that adequate support is present in the originally filed specification for this *amended* feature of claims 17-21.

12. Applicant's arguments filed 12/22/08 regarding the rejections of claims 1-23 and 25 under 35 USC § 103(a) have been fully considered but they are not persuasive.

Regarding claim 1, Applicant argues that Dunn does not teach "an interpreter producing a signaling configuration upon receiving an order to send a signaling message, wherein a type of signaling channel is selected from the signaling channels accessible to the coupler and the signaling configuration produced depends on the selected type of signaling channel" as claimed.

However, as provided in the previous Office Action, Dunn teaches processor 5 (interpreter) of switch 1 of Figure 1 that receives a request (order) to establish a connection from originating station 25, analyzes the digits of the call request, determines whether to route the call either over the Internet or the toll network based on the analysis, and then generates appropriate call setup signaling (configuration) for either the toll network (conventional call setup) or the Internet (IAM message) as spoken of on column 4, lines 5-18.

As Applicant noted, the signaling channel utilized is associated with the CCS7 network. In the teachings of Dunn, the CCS7 signaling channel is the type of channel selected as it is the signaling channel "accessible" to originating toll access switch 1. Further, the IAM signaling used is native (dependent) to the CCS7 channel being used.

It is held that Dunn teaches the above limitations in question.

Regarding claim 1, Applicant further argues that Dunn does not teach "a receiver for adding a receive flag to a received signaling message". Applicant further argues that a switch ID field is not a receive flag. Applicant further argues that one of skill in the art would not confuse an ID of a switch with a receive flag.

However, Dunn does teach terminating toll switch 2 (receiver) that in response to receipt of initial address message (IAM) 40, returns an IAM acknowledgement containing the same call ID as well as an added field IP 2 47 (flag) indicating the IP address of the terminating toll switch 2 as shown in Figure 1 and spoken of on column 3, lines 45-50. It is held that the added IP 2 field may be considered "a receive flag" since it is added to a received signaling message.

Regarding claim 1, Applicant further argues that there does not appear to be a relationship between switching network 6 and the messages received by the switch 2.

However, Dunn teaches network 6 (coupler) of switch 1 used for establishing connections between the PSTN and the Internet or toll network and a terminating access switch 2 as spoken of on column 2, lines 53-55. It is held that there is a communication relationship between the originating switch 1 containing network 6, and the terminating access switch 2 (receiver).

Applicant further argues that Dunn does not teach "an interpreter producing a signaling configuration upon receiving an order to send a signaling message ... wherein the order is a predetermined constant character string. Applicant further argues that the dialed digits of a call in Dunn are neither predetermined nor constant. Applicant further

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argues that the dialed digits are dynamic and different depending on the number being called.

However, as Applicant noted, Dunn teaches that "dialed information, such as one or more preliminary digits or symbols, can be used to specify that a particular call or series of calls are to be routed over the Internet, or are to be routed over the telephone network". Therefore, the detection of particular (predetermined) preliminary digits or symbols allows the proper routing of a call.

Further, it is held that the dialed digits intended for a particular terminating station (such as terminating station 26 of Figure 1) would constitute a "predetermined constant character string" as typically these dialed digits are assigned to particular terminating stations. It is held that one of ordinary skill in the art would realize that dialed digits corresponding to a particular call from an originating station to a terminating station may be considered "a predetermined constant character string", as the assigned digits are used to identify how to reach the intended recipient and complete the call.

In response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

Further, Applicant argues that Dunn and Park do not teach "wherein the receive flag is an internal flag of the switch and is not transmitted with the signaling message from the switch".

However, while Dunn does not teach "a receiver for adding a receive flag to a received signaling message" where "the receive flag is an internal flag of the switch and is not transmitted with the signaling message from the switch", Park was cited to teach this deficiency. As provided in the previous Office Action, Park teaches an apparatus for a switching system where internal flags used for transmission and reception of data are written and read to/from a common memory between a host processor 21 and a CPU 23 as spoken of on column 4, lines 2-18. These internal flags are used to instruct the outputting of particular announcement messages to a time switch 28 as spoken of on column 5, lines 36-44. It is held that these flags are internally exchanged such that other external messaging (separate from internal message exchange) may occur.

Further, while Dunn does not explicitly disclose the usage of internal flags for connection establishment and data transmission by the disclosed access switches, It is held that it would have been obvious to someone of ordinary skill in the art, given the internal flag use teachings of Park, to use additional internal signaling (using internal flags) within the access switches of Dunn in order to allow effective reception, processing, and transmission of data via internal switch components as spoken of on column 4, lines 2-18 of Park.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MICHAEL J. MOORE, JR., whose telephone number is (571)272-3168. The examiner can normally be reached on Monday-Friday (7:30am - 4:00pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jayanti K. Patel can be reached at (571) 272-2988. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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/Michael J. Moore, Jr./
Examiner, Art Unit 2419

